PATENT Atty Docket No.: 200208333-1

App. Ser. No.: 10/632,403

IN THE CLAIMS:

Please find below a listing of all of the pending claims. The status of each claim is set

forth in parentheses. This listing will replace all prior versions, and listings, of claims in the

present application.

(Currently Amended) A method, comprising:

receiving a user request into a coordinating device;

processing with said coordinating device a service description information for each of a

plurality electronic devices available ad-hoc to identify functionally responsive combinations of

electronic devices capable of servicing said user request;

calculating a score for each such functionally responsive combination, said calculating

using user preference information;

configuring said available electronic devices into an ad-hoc combination according to

said scores; and

servicing said user request with said ad-hoc combination,

wherein calculating the score for each functionally responsive combination is based on a

weight assigned to each of the devices in the functionally responsive combination according to a

combination-level policy, an unweighted device score for each of the devices, and a percentage

indicating availability of each of the devices.

2. (Previously Presented) The method of claim 1, further comprising:

building said service description information for a respective device from a service

identifier, which is representative of a function which said respective device is able to provide;

at least one required service identifier, each at least one required service identifier being

representative of services that said respective device requires to provide said function;

device attribute information, which is representative of characteristics of said device; and

attribute values, which are representative of a relative score for a respective device

attribute.

3. (Currently Amended) The method of claim 2, further comprising:

including in said identification of functionally responsive combinations identifying

devices having a service identifier which corresponds to said user request and thereafter

combines each of said identified devices with other devices, each of the other devices having a

service identifier which matches a required service identifier of a respective identified device.

4. (Original) The method of claim 3, further comprising:

computing a separate device score for each device included in a functionally responsive

combination, such that for each device said computing uses said device's attribute values and

weighs said attribute values according to said user preference information.

5. (Original) The method of claim 4, further comprising:

weighting said attributes values with a device-level policy comprising a vector of weights which encodes said user preference information for said device attributes.

- 6. (Original) The method of claim 3, further comprising: selecting a device-level policy from a predefined group of device-level policies.
- 7. (Original) The method of claim 6, further comprising:

computing said device score as:

$$DS(D, DP) = \sum_{i=1}^{d} aw_i(DP) * D(v_i)$$

where:

DS is said device score for device D according to a device-level policy DP:

d is said number of attributes for said device:

awi(DP) is said weight of attribute i according to policy DP; and

 $D(v_i)$  is said device's value  $(v_i)$  for attribute i.

8. (Original) The method of claim 4, further comprising:

using said device scores for each device in a functionally responsive combination such that each device score is weighting according to said user preference information.

(Previously Presented) The method of claim 8, further comprising:
using a parameter which is indicative of availability of said device.

## 10. (Original) The method of claim 9, further comprising:

encoding a vector of weights for said user preference information for said device's in a

## 11. (Currently Amended) The method of claim 9, further comprising:

eemputing wherein the score for each functionally, responsive combination said-score is calculated as:

$$AS(A, AP) = \sum_{i=1}^{n} sw_{i}(D, AP) * e(D_{i}) * DS_{i}(D, DP_{i})$$

where:

A is a particular combination;

AP is [[a]] the combination-level policy;

AS is [[said]] the score;

n is [[said]]  $\underline{a}$  number of devices that are included in said particular combination;

 $sw_i$  is [[a]] the weight assigned to [[said]] each device of type i according to said combination-level policy AP:

DP is a device scoring policy;

 $DS_i$  is [[an]] the unweighted device score for each device D; and

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 $e(D_i)$  is [[a]] the percentage indicating [[said]] the availability of said device  $D_i$ .

A programmable apparatus for selecting a combination of 12. (Currently Amended)

electronic devices from a plurality of available electronic devices for performing a user request.

each electronic device having service description information associated therewith, said

apparatus comprising:

user interface means for receiving a user request;

a processor for processing said service description information [[forl] associated with

said available electronic devices to identify functionally responsive combinations of electronic

devices, each functionally responsive combination responsive being capable of servicing said

user request; and for calculating a score for each functionally responsive combination, said

calculating using user preference information; and for selecting one of said functionally

responsive combinations according to said scores.

wherein calculating the score for each functionally responsive combination is based on a

weight assigned to each of the electronic devices in the functionally responsive combination

according to a combination-level policy, an unweighted device score for each of the electronic

devices, and a percentage indicating availability of each of the electronic devices.

13. (Original) The apparatus according to claim 12 wherein said service description information

for a respective device comprises:

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a service identifier, which is representative of a function which said device is able to

provide;

required service identifier, which is representative of services that said device requires to

provide said function:

device attribute information, which is representative of characteristics of said device; and

attribute values, which are representative of a relative score for a respective device

attribute.

14. (Currently Amended) Computer data storage media having programmed thereon computer

software instructions to make a programmable device execute [[said]] the following steps:

receiving a user request;

processing service description information for each of plural available devices to identify

functionally responsive combinations of devices, each functionally responsive combination

responsive being capable of servicing said user request;

calculating a score for each functionally responsive combination, said calculating using

user preference information; and

selecting one of said functionally responsive combinations according to said scores,

wherein calculating the score for each functionally responsive combination is based on a

weight assigned to each of the electronic devices in the functionally responsive combination

according to a combination-level policy, an unweighted device score for each of the electronic

devices, and a percentage indicating availability of each of the electronic devices.

15. (Original) Computer data storage media according to claim 14 wherein said computer software instructions comprise run time software modules and configuration software modules, said run time modules comprising:

a user interface module for receiving said user request;

a service registration and look up module for registering said service description information for said available devices:

an aggregator module for identifying said functionally responsive combinations of devices:

an evaluator module for calculating said scores for each of said functionally responsive combinations; and

wherein said configuration modules include:

a service repository for storing said service description information for each registered device;

a policy repository for storing policy information; and

user preference history files for storing historical user preference and contextual information.